

# Other Structural Clay Product Manufacturing: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



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U.S. Department of Commerce  
Economics and Statistics Administration  
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-- Not applicable for this report.

**Table 1. Historical Statistics for the Industry: 2002 and Earlier Years**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	All estab- lish- ments <sup>3</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)				
327123, Other structural clay product manufacturing .....											
2002..	50	53	1 689	55 856	1 303	2 728	38 790	146 878	59 435	200 791	17 538
2001..	N	N	1 522	43 928	1 171	2 374	30 073	108 810	46 340	158 112	5 893
2000..	N	N	1 473	43 148	1 151	2 342	29 878	108 758	45 057	147 525	6 603
1999..	N	N	1 452	41 457	1 003	2 198	27 035	95 045	40 470	135 909	8 737
1998..	N	N	1 490	38 270	1 143	2 312	24 871	90 388	35 981	128 580	8 481
1997..	48	51	1 332	35 163	1 025	1 945	22 877	80 941	34 771	117 376	4 856

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Industry Statistics for Selected States: 2002**

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
<b>327123, Other structural clay product manufacturing</b>												
United States .....	—	53	20	1 689	55 856	1 303	2 728	38 790	146 878	59 435	200 791	17 538
California .....	—	7	6	533	17 695	396	815	12 996	54 344	21 582	74 215	9 483
Ohio .....	—	7	4	405	15 188	323	707	10 709	32 946	11 177	42 052	2 302

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 3. Detailed Statistics by Industry: 2002**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
<b>327123, Other structural clay product manufacturing</b>	
Companies <sup>1</sup> .....	number.. 50
All establishments <sup>2</sup> .....	number.. 53
Establishments with 1 to 19 employees .....	number.. 33
Establishments with 20 to 99 employees .....	number.. 15
Establishments with 100 employees or more .....	number.. 5
All employees <sup>3</sup> .....	number.. 1 689
Total compensation .....	\$1,000.. 70 533
Annual payroll .....	\$1,000.. 55 856
Total fringe benefits .....	\$1,000.. 14 677
Production workers, average for year .....	number.. 1 303
Production workers on March 12 .....	number.. 1 307
Production workers on May 12 .....	number.. 1 289
Production workers on August 12 .....	number.. 1 319
Production workers on November 12 .....	number.. 1 294
Production worker hours .....	1,000.. 2 728
Production worker wages .....	\$1,000.. 38 790
Total cost of materials .....	\$1,000.. 59 435
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 36 403
Resales .....	\$1,000.. 3 816
Purchased fuels .....	\$1,000.. 13 892
Purchased electricity .....	\$1,000.. 5 007
Contract work .....	\$1,000.. 317
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 61 472
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. S
Total value of shipments .....	\$1,000.. 200 791
Primary products value of shipments .....	\$1,000.. 169 451
Secondary products value of shipments .....	\$1,000.. 21 962
Total miscellaneous receipts .....	\$1,000.. 9 378
Value of resales .....	\$1,000.. 4 876
Contract receipts .....	\$1,000.. 4 166
Other miscellaneous receipts .....	\$1,000.. 336
Primary products specialization ratio .....	percent.. 89
Value of primary products shipments made in all industries .....	\$1,000.. 191 457
Value of primary products shipments made in this industry .....	\$1,000.. 169 451
Value of primary products shipments made in other industries .....	\$1,000.. 22 006
Coverage ratio .....	percent.. 89
Value added .....	\$1,000.. 146 878
Total inventories, beginning of year .....	\$1,000.. 28 684
Finished goods inventories .....	\$1,000.. 20 632
Work-in-process inventories .....	\$1,000.. 2 125
Materials and supplies inventories .....	\$1,000.. 5 927
Total inventories, end of year .....	\$1,000.. 36 024
Finished goods inventories .....	\$1,000.. 25 585
Work-in-process inventories .....	\$1,000.. 2 694
Materials and supplies inventories .....	\$1,000.. 7 745
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. 117 137
Total capital expenditures (new and used) .....	\$1,000.. 17 538
Buildings and other structures (new and used) .....	\$1,000.. 4 328
Machinery and equipment (new and used) .....	\$1,000.. 13 210
Automobiles, trucks, etc., for highway use .....	\$1,000.. 552
Computers and peripheral data processing equipment .....	\$1,000.. 332
All other expenditures for machinery and equipment .....	\$1,000.. 12 326
Total retirements .....	\$1,000.. 4 086
Gross value of depreciable assets at end of year .....	\$1,000.. 130 589
Depreciation charges during year .....	\$1,000.. 5 669
Total rental payments .....	\$1,000.. 2 030
Buildings and other structures .....	\$1,000.. 1 027
Machinery and equipment .....	\$1,000.. 1 003
Total other expenses <sup>4</sup> .....	\$1,000.. 17 281
Response coverage ratio <sup>5</sup> .....	percent.. 93
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 4 371
Communications services <sup>4</sup> .....	\$1,000.. 513
Legal services <sup>4</sup> .....	\$1,000.. 510
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 211
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 2 075
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 428
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 256
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 393
Taxes and license fees <sup>4</sup> .....	\$1,000.. 800
All other expenses <sup>4</sup> .....	\$1,000.. 7 725

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E <sup>1</sup>	All establishments <sup>2</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
327123, Other structural clay product manufacturing											
All establishments .....	—	53	1 689	55 856	1 303	2 728	38 790	146 878	59 435	200 791	17 538
Establishments with—											
1 to 4 employees .....	7	19	45	1 091	32	58	685	2 412	837	3 247	200
5 to 9 employees .....	2	6	37	872	25	45	561	2 414	871	3 230	162
10 to 19 employees .....	1	8	113	3 097	86	175	2 044	7 053	2 976	9 826	1 097
20 to 49 employees .....	—	9	350	12 254	260	450	7 296	41 140	17 252	60 157	1 566
50 to 99 employees .....	—	6	393	12 280	314	669	8 632	30 279	19 222	46 895	2 607
100 to 249 employees .....	—	5	751	26 262	586	1 331	19 572	63 580	18 277	77 436	11 906
250 to 499 employees .....	—	—	—	—	—	—	—	—	—	—	—
500 to 999 employees .....	—	—	—	—	—	—	—	—	—	—	—
1,000 to 2,499 employees .....	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	15	31	759	24	44	521	1 643	615	2 258	144

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments <sup>1</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)				
327123	Other structural clay product manufacturing .....	53	1 689	55 856	1 303	2 728	38 790	146 878	59 435	200 791	17 538
3271231	Vitrified clay sewer pipe and fittings .	7	572	18 712	439	1 022	13 860	48 238	21 718	65 129	2 838
3271234	All other structural clay products (architectural terra cotta, drain tile, flue tile, roofing tile, conduit, etc.), except clay refractories .....	23	1 021	34 729	788	1 560	23 186	93 339	35 908	128 557	14 296

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
327123	Other structural clay product manufacturing .....	2002.. N	X	X	191 457
	1997.. N	N	X	X	120 284
3271231	Vitrified clay sewer pipe and fittings .....	2002.. N	X	X	50 407
	1997.. N	N	X	X	46 531
32712311	Vitrified clay sewer pipe and fittings .....	2002.. N	X	X	50 407
	1997.. N	N	X	X	46 531
3271231100	Vitrified clay sewer pipe and fittings <sup>1</sup> .....	2002.. 5	X	X	50 407
	1997.. 6	N	X	X	46 531
3271234	All other structural clay products (architectural terra cotta, drain tile, flue tile, roofing tile, conduit, etc.), except clay refractories .....	2002.. N	X	X	135 102
	1997.. N	N	X	X	63 929
32712341	All other structural clay products (architectural terra cotta, drain tile, flue tile, roofing tile, conduit, etc.), except clay refractories .....	2002.. N	X	X	135 102
	1997.. N	N	X	X	63 929
3271234100	All other structural clay products (architectural terra cotta, drain tile, flue tile, roofing tile, conduit, etc.), except clay refractories <sup>2</sup> .....	2002.. 35	X	X	135 102
	1997.. 23	N	X	X	63 929
327123W	Other structural clay product manufacturing, nsk, total .....	2002.. N	X	X	5 948
	1997.. N	N	X	X	9 824
327123WY	Other structural clay product manufacturing, nsk, total .....	2002.. N	X	X	5 948
	1997.. N	N	X	X	9 824
327123WYWW	Other structural clay product manufacturing, nsk, for nonadministrative-record establishments .....	2002.. N	X	X	3 714
	1997.. N	N	X	X	1 682
327123WYWY	Other structural clay product manufacturing, nsk, for administrative-record establishments .....	2002.. N	X	X	2 234
	1997.. N	N	X	X	8 142

<sup>1</sup>For additional detail, see Current Industrial Report MQ327D, Clay Construction Products.

<sup>2</sup>For additional detail, see Current Industrial Report MA327C, Refractories.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.



**Table 6b. Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3271231	Vitrified clay sewer pipe and fittings	
	United States ..... 2002 ..	50 407
	..... 1997 ..	46 531
3271234	All other structural clay products (architectural terra cotta, drain tile, flue tile, roofing tile, conduit, etc.), except clay refractories	
	United States ..... 2002 ..	135 102
	..... 1997 ..	63 929
	California ..... 2002 ..	44 384
	..... 1997 ..	17 151
	Ohio ..... 2002 ..	37 215
	..... 1997 ..	23 184

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
327123	Other structural clay product manufacturing		
00900001	Total materials .....2002..	X	36 403
	.....1997..	X	22 975
21232011	Clay, ceramic, and refractory minerals .....2002..	X	15 144
	.....1997..	X	5 835
32500003	Industrial chemicals .....2002..	X	2 726
	.....1997..	X	1 360
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	18 162
	.....1997..	X	8 862
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	371
	.....1997..	X	6 918

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.